IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Inventor:	Masahiko Nagai		
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Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

APPEAL BRIEF

Dear Sir:

Attached herewith is an Appeal Brief pursuant to 35 U.S.C. §134 and 37 C.F.R. §41.37 for the above-identified patent application in support of a Notice of Appeal filed with the United States Patent and Trademark Office on February 11, 2009.

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I. REAL PARTY IN INTEREST

The real party in interest in the above-entitled application is Lenovo (Singapore) Pte. Ltd. of Singapore.

II. RELATED APPEALS AND INTERFERENCES

The undersigned attorney/agent, the appellant, and the assignee are not aware of any related appeals or interferences that would directly affect, or be directly affected by, or have a bearing on the Board's decision in this pending appeal.

III. STATUS OF THE CLAIMS

Claims 1-20 are pending and are all on appeal. Claims 1-20 stand rejected.

IV. STATUS OF AMENDMENTS

An after final amendment has been submitted and entered.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent **claim 1** is directed towards an apparatus comprising: first and second members movable one relative to the other; an element mounted in one of said members which initiates an action in the apparatus; a detector mounted in the other of said members which responds to the proximity of and detects the intensity of interaction with said element; an inhibitor mounted in one of said members which selectively inhibits the intensity of interaction between said element and said detector in response to said element being moved into the proximity of the detector; and a processor driving the inhibitor based on an output of the detector and configured to determine whether the first member is in physical proximity to the second member based on said output. (*See, inter alia,* page 10, lines 6-14; and Fig. 1).

Independent **claim 8** is directed towards an apparatus comprising a portable computer system body having a keyboard therein; a portable computer system lid having a display therein; a coupling joining said body and said lid together for movement thereof one relative to the other between open and closed positions; and a proximity detection subsystem which determines whether said body and said lid are in the closed position, said subsystem comprising: an element mounted in one of said body and said lid which initiates an action in the apparatus; a detector mounted in the other of said body and said lid which responds to the proximity of and detects the intensity of interaction with said element; an inhibitor mounted in said one of said body and said lid which selectively inhibits the intensity of interaction between said element and said detector in response to the element being moved into the proximity of the detector; and a processor driving the inhibitor based on an output of the detector and configured to determine whether the lid and body are in the closed position based on said output. (*See, inter alia,* page 10, lines 6-14; and Fig. 1).

Independent **claim 10** is directed towards a method comprising detecting reception of a signal interaction of two members coupled for movement one relative to the other normally indicative of initiation of a system operation; selectively inhibiting reception of the signal interaction in response to the detected reception; and detecting a physical proximity of the two members and determining the appropriateness of initiating the system operation from close proximity of the members. (*See, inter alia,* page 4, lines 15-22).

Independent **claim 11** is directed towards a method comprising monitoring an output of a detector mounted in one of two members coupled for movement one relative to the other based on signal interaction of an element in the other member with the detector; detecting an output normally indicative of initiation of a system operation; selectively inhibiting the signal interaction of the element with the detector in response to detecting the signal interaction; and

detecting a physical proximity of the members and determining the appropriateness of initiating the system operation from close proximity of the members. (*See, inter alia,* page 8, lines 8-24).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 14 and 15 are anticipated under 35 U.S.C. §102(e) by Bilotti et al. (US 6,622,012).

Whether claims 1-13 and 19-20 are unpatentable under 35 U.S.C. §103(a) over Bilotti et al. in view of Kammerer et al. (US 4,492,925).

Whether claim 5 is unpatentable under 35 U.S.C. §103(a) over Bilotti et al. in view of Kammerer et al., and further in view of Deckzy (US 4,294,682).

Whether claim 16 is unpatentable under 35 U.S.C. §103(a) over Bilotti et al. in view of Kammerer et al., and further in view of Bartingale et al. (US 2003/0048102).

Whether claim 17 is unpatentable under 35 U.S.C. §103(a) over Bilotti et al. in view of Kammerer et al., and further in view of Suter et al. (US 5,323,011).

VII. ARGUMENTS

A. The Rejection of Claims 14 and 15 under 35 U.S.C. §102(e)

Claims 14 and 15 stand rejected under 35 U.S.C. §102(e) as being anticipated by Bilotti et al. **Claims 14 and 15** respectively depend from claims 10 and 11 and are allowable at least by virtue of their dependencies.

B. The Rejection of Claims 1-13 and 19-20 under 35 U.S.C. §103(a)

Claims 1-13 and 19-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Billoti et al. in view of Kammerer et al. This rejection should be reversed because the combination of the cited references fails to establish a *prima facie* case of obviousness with respect to the subject claims.

> The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___ (2007). MPEP §2143.

Claim 1

Independent **claim 1** is directed to an apparatus that includes, *inter alia*, **an inhibitor** mounted in one of the members **which selectively inhibits the intensity of interaction between an element in a first member and a detector in a second member** in response to the element being moved into the proximity of the detector; and **a processor driving the inhibitor** based on an output of the detector **and configured to determine whether the first member is in physical proximity to the second member based on said output**. The combination of Bilotti et al. and Kammerer et al. does not teach or suggest the emphasized claim aspects.

The Office concedes that Bilotti et al. does not disclose an inhibitor mounted in one of the members which selectively inhibits the intensity of interaction between the element and the detector in response to the element being moved into proximity of the detector. In an attempt to make up for this conceded deficiency, the Office asserts that Kammerer et al. teaches a system and method for an inhibitor mounted in one of the members which selectively inhibits the intensity of interaction between the element and the detector in response to the element being moved into the proximity of the detector (col. 1, lines 30-37 and col. 5, lines 5-15).

With more specificity, the Office asserts that the damping circuit in Kammerer et al. is the inhibitor. Appellant respectfully disagrees that this makes up for the conceded deficiencies of Bilotti et al. because the damping circuit taught in Kammerer et al. is not an inhibitor mounted in one of the members which selectively inhibits the intensity of the interaction between the element M and the proximity switch 8 in response to the element M being moved into the proximity of the detector.

More particularly, Kammerer et al. teaches that the proximity switch 8 is provided as an element of a machine control means (abstract). Associated with the proximity switch is a control circuit 10 and a damping circuit (col. 2, lines 50-55). The control circuit 10 causes the damping circuit to damp the oscillator of the proximity switch 8 if the metal element M is moved into proximity of a feeler coil L of the proximity switch 8 (col. 3, lines 67-68 to col. 4, lines 1-8; Fig. 1). Additionally, the control circuit 10 continuously monitors the correct functioning of the proximity switch 8 by causing the damping circuit to short circuit the feeler coil L at, for example, at a timed frequency of 140 Hz and simulates damping of the oscillator of the proximity switch 8 (col. 5, lines 38-50).

However, Kammerer et al. fails to teach that the damping circuit is an inhibitor mounted in one of the members which selectively inhibits the intensity of the interaction between the element M and the proximity switch 8 in response to the element M being moved into proximity of the proximity switch as required by claim 1. Instead, Kammerer et al. teaches that if the proximity switch 8 is damped by moving the metal element M into proximity of the proximity switch 8, the level of an output signal A of the proximity switch 8 provided to an actuating circuit 12 practically sinks to the value of 0 volts (col. 4, lines 45-60). The actuating circuit 12 is connected to a relay circuit 14 (col. 2, lines 56-57) which is further connected to a main contact circuit 16 (Fig. 1) of machine control means (col. 2, lines 23-32). With the proximity switch 8 damped, the main contact circuit 16 of the machine control means remains closed (col. 9, lines 4-55) preventing the machine from starting or switching the machine off (col. 4, lines 66-68 to col. 5, lines 1-2).

In other words, the damping circuit taught in Kammerer et al. damps the proximity switch 8 when the element M is brought into proximity of proximity switch 8 but it does not selectively inhibit the intensity of the interaction between the element and the detector in response to the element being moved into the proximity of the detector as required by claim 1. As such, the intensity of interaction between element M and proximity switch 8 is not selectively inhibited when proximity switch 8 is damped. Hence, the damping circuit taught in Kammerer et al. is not an inhibitor which selectively inhibits the intensity of the interaction

between the element and detector in response to the element being moved into proximity of the detector as required by claim 1.

In the Advisory Action, the Office again asserts that Kammerer et al. teaches an inhibitor, or damping circuit, that selectively inhibits the interaction between the element and the detector (see col. 5, lines 1-15). Appellant respectfully disagrees. As discussed above, Kammerer et al. fails to teach that the damping circuit is an inhibitor mounted in one of the members which selectively inhibits the intensity of the interaction between the element and the detector in response to the element being moved into the proximity of the detector as required by claim 1.

In addition, both Bilotti et al. and Kammerer et al. fail to teach a processor driving the inhibitor based on the output of the detector and configured to determine whether the first member is in physical proximity to the second member based on the output as required by claim 1. Instead, the control circuit 22 taught in Bilotti et al. (Fig. 1) implements, or causes to be implemented, certain functions depending on the position of the cover 14 (i.e., depending on whether the cover 14 is opened or closed (col. 4, lines 16-19)). For example, when the cover 14 is closed, switch 20 provides a signal to control circuit 22 so indicating and control circuit 22 causes cell phone 10 to operate in a power save mode (col. 4, lines 19-22). However, none of these functions include driving an inhibitor based on the output of the detector and determining whether the first member is in physical proximity to the second member based on the output. As such, the control circuit 22 is not a processor that drives an inhibitor based on the output of the detector and configured to determine whether the first member is in physical proximity to the second member based on the output as required by claim 1.

In view of the foregoing, this rejection should be reversed.

Claims 8, 10 and 11

Independent **claims 8, 10 and 11** contain claim aspects similar to those recited in claim 1. As such, the above discussion with respect to claim 1 applies *mutatis mutandis* to claims 8, 10 and 11, and these rejections should be reversed.

Claims 2-7, 9, 12-13 and 19-20

Claims 2-7, 9, 12-13 and 19-20 respectively depend from claims 1, 8, 10 and 11, and are allowable at least by virtue of their dependencies. Accordingly, these rejections should be reversed.

C. <u>The Rejection of Claim 5 under 35 U.S.C. §103(a)</u>

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Billoti et al. in view of Kammerer et al., and further in view of Deczky. **Claim 5** depends from claim 1 and is allowable at least by virtue of dependency upon an allowable base claim, and Deczky fails to cure the deficiencies noted above with respect to claim 1. Accordingly, this rejection should be reversed.

D. <u>The Rejection of Claim 16 under 35 U.S.C. §103(a)</u>

Claim 16 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Billoti et al. in view of Kammerer et al., and further in view of Bartingale. **Claim 16** depends from claim 1 and is allowable at least by virtue of dependency upon an allowable base claim, and Bartingale et al. fails to cure the deficiencies noted above with respect to claim 1. Accordingly, this rejection should be reversed.

E. <u>The Rejection of Claim 17 under 35 U.S.C. §103(a)</u>

Claim 17 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Billoti et al. in view of Kammerer et al., and further in view of Suter et al. **Claim 17** depends from claim 8 and is allowable at least by virtue of dependency on an allowable base claim, and

Suter et al. fails to cure the deficiencies noted above with respect to claim 1. Accordingly, this rejection should be reversed.

F. Conclusion

In view of the foregoing, it is submitted that claims 1-20 distinguish patentably and non-obviously over the prior art of record, and reversal of the rejection of claims 1-20 is respectfully requested.

Respectfully submitted,

Date: April 8, 2009

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MJC:cg

Attachments

VIII. CLAIM APPENDIX

1. (Previously Presented) Apparatus comprising:

first and second members movable one relative to the other;

an element mounted in one of said members which initiates an action in the apparatus;

a detector mounted in the other of said members which responds to the proximity of and detects the intensity of interaction with said element;

an inhibitor mounted in one of said members which selectively inhibits the intensity of interaction between said element and said detector in response to said element being moved into the proximity of the detector; and

a processor driving the inhibitor based on an output of the detector and configured to determine whether the first member is in physical proximity to the second member based on said output.

2. (Original) Apparatus according to claim 1 wherein said element is free of any necessity of application of an external source of power.

3. (Original) Apparatus according to claim 1 wherein said detector responds to one of an electromagnetic wave, an electric field, a magnetic field, corpuscular radiation, and an acoustic wave.

4. (Original) Apparatus according to claim 1 wherein said element is a magnet, said detector is a Hall effect switch responsive to imposition of a magnetic field, and said inhibitor is a coil generating a magnetic field opposing the field of said magnet.

5. (Original) Apparatus according to claim 1 wherein said element is a light source, said detector is a photoelectric device, and said inhibitor is a light shield.

6. (Original) Apparatus according to claim 1 wherein one of said members is the lid of a portable computer system having a display therein and the other of said members is the body of a portable computer system having a keyboard therein.

7. (Original) Apparatus according to claim 1 wherein said inhibitor is responsive to a coded driving signal and further wherein said inhibitor, said element and said detector cooperate in determining the physical proximity of said members one relative to the other by detection of the coded driving signal.

8. (Previously Presented) Apparatus comprising:

a portable computer system body having a keyboard therein;

a portable computer system lid having a display therein;

a coupling joining said body and said lid together for movement thereof one relative to the other between open and closed positions; and

a proximity detection subsystem which determines whether said body and said lid are in the closed position, said subsystem comprising:

an element mounted in one of said body and said lid which initiates an action in the apparatus;

a detector mounted in the other of said body and said lid which responds to the proximity of and detects the intensity of interaction with said element;

an inhibitor mounted in said one of said body and said lid which selectively inhibits the intensity of interaction between said element and said detector in response to the element being moved into the proximity of the detector; and

a processor driving the inhibitor based on an output of the detector and configured to determine whether the lid and body are in the closed position based on said output.

9. (Original) Apparatus according to claim 8 wherein said element is a magnet, said detector is a Hall effect switch responsive to imposition of a magnetic field, and said inhibitor is a coil generating a magnetic field opposing the field of said magnet and further comprising a microprocessor operatively connected to control excitation of said coil.

10. (Previously Presented) A method comprising:

detecting reception of a signal interaction of two members coupled for movement one relative to the other normally indicative of initiation of a system operation;

selectively inhibiting reception of the signal interaction in response to the detected reception; and

detecting a physical proximity of the two members and determining the appropriateness of initiating the system operation from close proximity of the members.

11. (Previously Presented) A method comprising:

monitoring an output of a detector mounted in one of two members coupled for movement one relative to the other based on signal interaction of an element in the other member with the detector;

detecting an output normally indicative of initiation of a system operation;

selectively inhibiting the signal interaction of the element with the detector in response to detecting the signal interaction; and

detecting a physical proximity of the members and determining the appropriateness of initiating the system operation from close proximity of the members.

12. (Original) A method according to claim 11 wherein the selective inhibition of response occurs in response to detection that the members are withdrawn one from the other.

13. (Original) A method according to claim 11 wherein selective inhibition of response is discontinued in response to detection that the members are in close proximity one to the other.

14. (Previously Presented) A computer program product comprising a computer readable medium and code stored on the medium which is effective when executing in a computer system to cause the system to perform the steps of claim 10.

15. (Previously Presented) A computer program product comprising a computer readable medium and code stored on the medium which is effective when executing in a computer system to cause the system to perform the steps of claim 11.

16. (Previously Presented) The apparatus according to claim 1 wherein the element is a magnet and further including a noise magnetic field filter that filters external magnetic noise, thereby mitigating interaction between the external magnetic noise and the detector when the first and second members are in close proximity to each other.

17. (Previously Presented) The apparatus according to claim 8 wherein the detector responds to corpuscular radiation.

18. (Previously Presented) The method of claim 10 further including filtering noise that mimics the signal when the members are in a first position, with respect to each other, where the signal is not detected.

19. (Previously Presented) The method of claim 11 further including preventing detection of the output.

20. (Previously Presented) The method of claim 1 wherein the inhibitor is activated by a power supply external to the inhibitor.

IX. EVIDENCE APPENDIX

None.

X. <u>RELATED PROCEEDINGS APPENDIX</u>

None known to undersigned attorney/agent.